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II

FORTVNA VIRTVTE DOMITA

DECORATED WOODEN CEILINGS IN SPAIN

BY

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AND

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ILLUSTRATED

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186512

FOREWORD

Old decorated wooden ceilings are abundant in Spain. They are called *artesonados*, and are of remote origin. Prudencio, the Spanish Roman, writing late in the fourth century, describes the "gilded ceiling with painted coffers" which covered the basilica of Saint Eulalia in Mérida; and Saint Isidore of Seville, the Visigoth, writing in the seventh, also mentions rich artesonados of wood. No example from these far-off days has come down to us, but there was recently uncovered in the mosque of Córdova a considerable area of decorated wooden ceiling, probably the original ninth-century one so praised by early Arab poets. At any rate, it is with the Moorish occupation that the authentic history of this subject begins, and it is in Andalusia, where Moorish influence lasted longest, that the tradi-

tion still persists. It must not be inferred, however, that all Spanish ceilings are of typical Eastern carpentry, for the beamed and coffered varieties common to all Europe were by no means unknown to Spain.

Owing to the perishable nature of the material and the tumultuous centuries through which Spain has passed, there is no complete example extant older than six or seven centuries, except the previously mentioned work in Córdova; but as some of the oldest existing are known to be repetitions of their deteriorated predecessors, a fair idea of Spanish ceilings as constructed in Moorish, Romanesque, Gothic, and Renaissance days may be formed from the material presented in the portfolio of *Plates* published simultaneously with this volume.

No attempt has been made to adequately illustrate those stalactite constructions and profuse inlaid decorations so typically Eastern, although a few have been included in justice to the Moorish craftsman's skill. Similarly, to show the extravagance of

those designers who tried to blend Moorish with flamboyant Gothic, some of the extraordinary Guadalajara examples are given; but, mainly, the book treats of simpler effects produced by straightforward, easily understood methods, within the scope of modern carpentry.

Considering that the wooden ceilings of Spain are unique in Europe, save for a few Sicilian examples dating from the Saracenic occupation, it is surprising that they have gone thus far unrecorded and have never been offered in collected form. It is hoped that their presentation may stimulate all who are interested in good woodwork, and reveal to them to what an appreciable extent artistic carpentry was made to contribute to the embellishment of the architectural fabric in Spain.

M. S.
A. B.

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Simultaneously with this volume The Hispanic Society of America publishes a Portfolio of Plates by the same authors containing representative examples, both as to structure and decoration, of Spanish Ceilings.

DECORATED WOODEN CEILINGS IN SPAIN

I

SOME GENERAL FACTS ABOUT CEILING-MAKING

CEILING-MAKERS in Spain were classed with the *carpinteros de lo blanco*, that is, carpenters in common wood, generally pine. Some of these carpenters worked in the shop on small objects, but the men we are now concerned with worked their common wood artistically and applied it monumentally to buildings. One of them, Diego López de Arenas (see *Frontispiece*), has come down to fame by writing the only treatise known on his craft. His book, *Carpintería de lo Blanco*, was printed at Seville in 1633, since when there have been three more editions.[1] It gives rules for constructing the interlaced stars which Moorish carpenters had introduced centuries before into Spanish carpentry; also for curving and patterning the difficult half-orange

or dome. Moorish terms abound in the book and prove the origin of the art. Several of the author's ceilings still stand in Seville. We know furthermore from his title of *alcalde alarife*, or chief builder, that he was a busy member of the Carpenters' Guild, examining applicants for membership, appraising completed work, etc., these being the duties of that grade of *alcalde*. The Guild, large and prosperous in Seville, met annually on *Corpus Christi* or the Sunday following in the Hospital of Santiago. Its patron was Saint Joseph, the carpenter, and to him Diego López dedicated his quaint book.

A Sevillian of our own day, the late Don José Gestoso, has made a dictionary of the early artisans who worked in his city, including of course the carpenters.[2] From the old account books of the cathedral and the Town Hall (*Ayuntamiento*) he has culled their names and the wages paid them. It appears from the meagre data encountered that the constructor was also the designer of the ceiling. The author, Diego López, both designed and built the

beautiful ceiling in the convent church of *Santa Paula* in Seville. Apparently any practician expert enough to be admitted to the guild designed his own works. This is the opinion of Don Ramírez de Arellano, who found the names of a few ceiling-makers during recent researches among the archives of Córdova. "Among the artists of Spain," he says, "must be included those carpenters who from their own models worked the magnificent sixteenth- and seventeenth-century *artesonados* which cover many of our churches; for these men were no mere joiners who interpreted another's invention; they themselves made the drawings and created veritable architectural works. Only an artist could have made the ceiling in the church of *Jesús Crucificado*, or that in *San Pablo*[3] [*Portfolio, Plate XXXVI*] or in *El Carmen*."[4]

That the ceiling-maker worked independently of the architect, we know to have been the case in the superb chapter-room of Toledo Cathedral. (*Portfolio, Plate XXXVIII.*) It was built by

Pedro Gumiel and Enrique de Egas, who left the ceilings to Francisco de Lara and Diego López (not to be confounded with the author of *Carpintería de lo Blanco* who lived a century later). On the other hand, in the case of the rooms remodeled in the Moorish Alhambra for the use of Charles V, it is believed that the royal architect, Pedro Machuca, himself designed the fine Renaissance ceilings with their newly imported Italian motifs. (*Portfolio, Plate XLV.*)

The next question is, who decorated the ceiling? Don Ramírez de Arellano publishes in the article cited a contract made in 1572 between two carpenters of Córdova and the prior of the Monastery of the Holy Martyrs, of that same city, for a ceiling in one of the convent chapels. Conditions are most minutely set forth for every detail of carpentry and carving, but not a word is said about the painted decoration. This may mean either that the ceiling went unpainted (it no longer exists), or that the painting was not the carpenter's concern, just as the polychromy of the Spanish *retablo* was not

Fig. 1. Ceiling over the *Puerta del Lagarto*, Seville Cathedral. XVI Century.

the sculptor's.[5] In each case the designer and those working under him finished their part before the decorator was called in. A document published by Gestoso indicates that the same *pintor de imagineria* who painted and gilded retables did likewise for ceilings. It is an appeal made to the city fathers of Seville by two image painters who claimed payment for having embellished the sumptuous ceiling in the upper assembly room or *cabildo alto* in the Town Hall (*Portfolio, Plate LIV*), and is as follows:

> We, Antón Velazquez and Miguel Valles, declare that by us was carried out the work of gilding and painting the Cabildo Alto at a cost of eight hundred and eighty ducats, plus another twenty ducats which were to be given us for the coffers which we were not obliged to gild nor *estofar*[6] but which we did for the betterment of the aforesaid ceiling and in order that it might be well finished, and the which is really worth another eighty ducats because in gold alone it cost us thirty-two. Also we made a

round festoon which we were not obliged to make . . . and in addition we made a frieze in blue according to the orders given us and afterwards we had to change it back again according to orders, etc.[7]

In the same author's *Diccionario*[8] we meet another ceiling-painter pleading for his lawful payment, the extract being made this time from the Archives of the Royal Alcázar for the year 1624:

I, lucas desquibel, image-painter in the royal alcazar of this city of Sebilla declare that by order of Your Grace I have painted and gilded an escutcheon and coffered ceiling in the upper corridor of the royal patio. I beg and supplicate that Your Grace send a suitable person to appraise the work, remembering that I have paid for all, colors as well as mixing, the which has cost me much time and thought.

Concerning the artesonado already cited in the upper assembly room of the Seville

Town Hall one more entry of interest was found by Gestoso. It is taken from the Municipal Archives, expenses for the years 1570–1574:

> On the 27th of October, 1570, were paid fifty-seven thousand maravedis to pedro gutierrez carpenter being the second third of the four-hundred and sixty ducats[9] for which sum he had agreed to finish the work in the *cabildo alto*.

This, according to the compiler, refers only to the framing and coffering, for which the large pine beams brought from the region of Segura (Murcía), and whose cost is recorded on the same page, were used. In this case the framing and coffering ap pear to be extremely well paid compared with the contemporary work done in the Córdova monastery, where the contract states that "For the whole of this work eighty ducats are to be paid, first thirty, and the rest as the masters proceed"; but as the latter example no longer exists

there is no telling how it ranked either in size or ornateness with the magnificent Sevillian work.

In this trade of artistic carpentry, as in other occupations of the day, boys were apprenticed at a tender age. Gestoso found a contract of apprenticeship drawn up in Seville on February 20, 1560, from which it may be gathered that either the trade or the master was not always to the infant's liking since provision was made for capturing him should he run away:

> Let all know who read this contract that I nicolás garcía shoemaker resident of the town of Monasterio being in this city of Sebilla as father and legitimate administrator which I am of my son gonzalo aged thirteen years more or less do declare and make known that I put said son with you Francisco Hernández to serve as apprentice and if he should absent himself from your house and power I am bound to bring him back to you from wheresoever he may be found. . . .

Of ceiling-makers and ceilings prior to the Reconquest but few notices are to be found. We know that the Moors were proud of their gilded ceiling at Córdova, for they likened it, when sparkling above the thousand lamps of the mosque, to "the kindled flame or the lightning flash that darts across the heavens." If the original mosque covering that evoked the hyperbole of the Arab poet had not been replaced before the late sixteenth century (and there is no record of its deterioration), then we have a saner description of it from the pen of Ambrosio Morales who, by the king's order, traveled about Spain examining the great architectural monuments. His observations were published in the volumes entitled *Antigüedades de las Ciudades de España*, where he says of the Córdova ceiling: "The roof of the whole church, made of wood painted and adorned in divers ways, is of incredible richness. . . . It is of larch throughout, odorous, resembling that pine which is not found in any part but Barbary, whence it is brought by sea. And every time that any part of this

mosque has been demolished in order to add new construction[10] the wood removed has been sold for many thousands of ducats to be used in making guitars and other delicate objects."[11] Morales was probably wrong about the larch from Northern Africa, for if the ceiling he saw is the one now undergoing reconstruction, it is of an indigenous pitch pine (*pino alerce*) said to have once abounded around Seville.

In spite of the failure to keep more generous records of the men who embellished Spanish buildings with beautiful wooden ceilings, the actual carpentry itself was appreciated, if we are to judge from the eulogies found in the ordinances of Seville for the sixteenth century. In one it is spoken of as "a noble art complete in itself and, when carefully considered as it should be, it increases the nobility of the King and the Kingdom."

Spaniards usually refer to their ornamental wooden ceilings as *artesonados*. The literal meaning of this word is troughed or trough-like, an *artesa* being the ordinary

Fig. 2. Frieze in the *Salón de Linajes*, Infantado Palace, Guadalajara. XV Century.

oblong trough that, in Spain, animals are fed from, or that laundresses use — flat-bottomed, with inclined sides. Some consider the term as referring to the shape of the entire ceiling when this is a huge inverted trough; others take each separate coffer or *artesón* to be the form from which the whole derives its name. However this may be, in actual practice the word artesonado is applied to all worked wooden ceilings regardless either of general shape or that of the separate units.

Among the more specific terms is *techumbre*, augmentative of *techo*, a plain ceiling of any material. A techumbre is the ornamental wooden covering over a lofty hall. Such a feature would be the decorated underside of the roof construction as opposed to the artesonado, which is the underside of the floor above. Elaborate wooden ceilings over stair-halls are also called techumbres unless domed, when they are known as *media naranjas* or half-oranges (*Portfolio, Plate LVI*). This latter was a form for which the Moors had a greater predilection than their Christian

successors, perhaps because they were so much more skilful in surmounting the difficulties of its construction.

Another word found in ceiling lore is *alfarje*, to designate Moorish interlacings. Its derivation is disputed; if traceable to *al farx*, — Arabic for a carpet or covering of any sort, — its application to the whole ceiling is exact enough; but if, as others claim, the word be derived from *alfarjia*, Arabic for dimensioned timber, then the term would be more accurately applied to the framing alone. Spanish writers use it as elastically as they use artesonado.

Lacería or interlacing was the form of carpentry in which the Moor positively revelled. Anyone interested in the scientific manner of such construction will find it fully described in Don Antonio Prieto's book, *El Arte de la Lacería*. Without going into the technique of the system it may be said that the general principle was to make a great covering out of innumerable little pieces. Lacería is sometimes constructive as in the ceiling of the *Cabildo Antiguo*

of Granada (*Plate XXIX*); that is, the rafters interlace and lock together to form a framing on the back of which is nailed the boarding. In other cases the lacería is simply light strips nailed to a board backing, as is clearly seen in the ceiling over the entrance to Seville Cathedral from the Patio de los Naranjos (*Fig. 1, page 7*). Rarer is a third process: a structural interlocking as described in the first case, with board fill in the interstices and nailed flush to the face of the lacería. The two elements are differentiated by their decoration — scoring on the interlacing, inlay or painting on the boarding. Lacería was not the earliest form of Moorish ceiling carpentry, but once introduced, it became the most popular.

Ménsula, or *zapata*, is the Spanish term for a corbel or bracket. This was generally a typically Eastern conceit quite unlike the Gothic corbel of the North. Of ancient ceilings that have fallen piecemeal or been burnt, it is often the only surviving member, and hence the one most frequently encountered in the small provincial museums.

The *mocárabe* is the pendant or stalactite form; the *vigas* are the main beams, and the *friso*, the frieze.

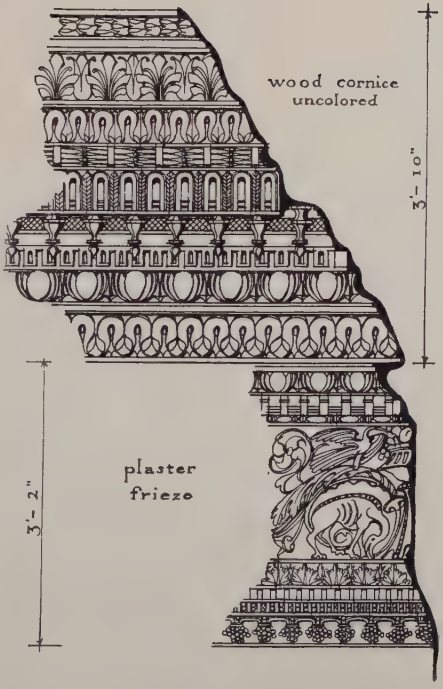

Fig. 3. Wooden cornice from a salon in the Palace of Peñaranda de Duero. XVI Century.

II

MUDEJAR CEILINGS, THEIR GENERAL HISTORY AND STRUCTURE

The form which Asiatic art took in Spain is conveniently termed Moorish; not that the Moors had an art of their own, for they were indebted for what they accomplished, after embracing Mohammedanism, to their Arab conquerors. These, to go still farther back, had learned largely from the Persians. But the Moors in time came to greatly outnumber and dominate the Arabs both in Morocco and the Iberian Peninsula, hence the designation Moorish in referring to their period of occupancy.

Carpentry was a field in which the Arab early attained great skill, leaving a record in all lands whither his conquests carried him. But his special proficiency in ceiling-making dates from his arrival on Spanish

soil. Wood had not been plentiful enough in his previous homes—Persia, Egypt, and other arid places—for him to use it on so large a scale. The more abundant supply in Spain led not only to the extraordinary development of ornamental ceilings but also of roof-framing to support heavy glazed tiles, in precisely the same way that the lack of wood in Persia had led to the development of skilful vaulting.

The richness of the Spanish wooden ceiling was not due solely to the oriental love of ornament. Climatic conditions in southern Spain were as unfavorable as in Egypt or Arabia to the use of wood in large sections. The heat caused it to warp and split, and so the carpenter cleverly combined it in myriad small bits to cover a large, often vast, surface. It was the same process he had formerly confined to small accessories such as doors and window screens. Sometimes, on the other hand, there was no such intricate assembling of many small units, but just a frank open rafter ceiling or a beamed ceiling,—this last treated in a way very different

from the trabeated covering familiar to the rest of Europe.

After the Reconquest was well established and the victorious Christians could turn their attention to erecting monuments, we get a new term in Spanish art—*Mudéjar.*[12] The Mudéjar Style is that evolved by Moorish artisans working for Christians—a blend of Asiatic and European elements both structural and decorative. In the latter sense it meant the play of pictorial fancy permitted by the Christians while not rejecting the rigid geometric system of the Mohammedans, to whom the use of the figure had been forbidden. No one feature resulting from the combination was more notable than the Mudéjar ceiling or *artesonado.* Indeed the ceiling of Moorish tradition could hardly have persisted had there not been plenty of patient Mudéjar craftsmen to put it together. Before the last of these Mudéjar craftsmen had been expelled from Spain (1609), the Spanish carpenters, too, had learned the art and they continued to practice it for many generations.

It is natural to look for the greatest number of carpentry ceilings or artesonados in those cities where the Mudéjares were tolerated in large numbers. Such were Toledo in Castile, Zaragoza in Aragón, Córdova and Seville in Andalusía. Here an imposing amount of architectural carpentry — cornices, wide eaves, corbels, balustrades, doors, and the like — may still be seen. Even more is this true of Granada where the Moors kept their own court until the end of the fifteenth century.

In all these places or, more broadly speaking, in the center and south of Spain, every kind of wooden covering was built, from the simple and universal arrangement of beams to the most elaborate Eastern conception of interlacings, stalactites, or coffers. It is not the intention to discuss the stalactite; but among the simpler sort of ceilings are certain forms, more often encountered than the rest, which offer abundant inspiration to modern workers both as to structure and applied decoration and which will be discussed in detail

presently. By no means were they all treated in polychrome, however; some of the most beautiful Mudéjar ceilings in the land went entirely unpainted, the pine being merely oiled until it took on a rich deep tone.

As a craftsman, the Mudéjar was very variable. Some of his ceilings can be found where the workmanship is as delicate as on a fine *vargueño*, or cabinet; others, and far more numerous, where it is as coarse as on any bit of ordinary carpentry. Where something fine was to be executed the masters of the land were summoned; in other cases the work fell into the hands of local talent. In the chapter-room of Toledo Cathedral is a ceiling exquisitely fashioned down to the last detail (*Portfolio, Plates XXXVIII, XXXIX*), but contemporaneous with it are the Infantado Palace ceilings at Guadalajara (*Fig. 2, page 15*, and *Plate XXXV*), crude and heavy and slightingly executed. Again, the remarkable set at Peñaranda de Duero (*Fig. 3, page 21*, and *Plates LII, LIII*), so effective from below, are seen

on close examination to be coarsely cut and put together without nicety. The wood was not carefully chosen and the carving of molds and rosettes is devoid of sentiment; but even so, since the principles of design and construction were never lost sight of, the result is distinctly imposing.

It would appear that the inferior execution, where it is inferior, was quite deliberate, as if the Moors relied on the height at which the work was to be placed, and the extent of it, to render crude methods unapparent. Moreover, the long and tedious system of assembling innumerable small units almost inevitably invited to slackness, and it is extremely doubtful whether the effect in the last analysis would have been much different had the actual carpentry been finer. From below it is hardly discernible that massive-looking pendants are in reality built up of many small sections fastened to a central box-core, in the manner of *Fig. 4*, that coffers are made exactly like any drinking-trough and then covered with applied moldings,

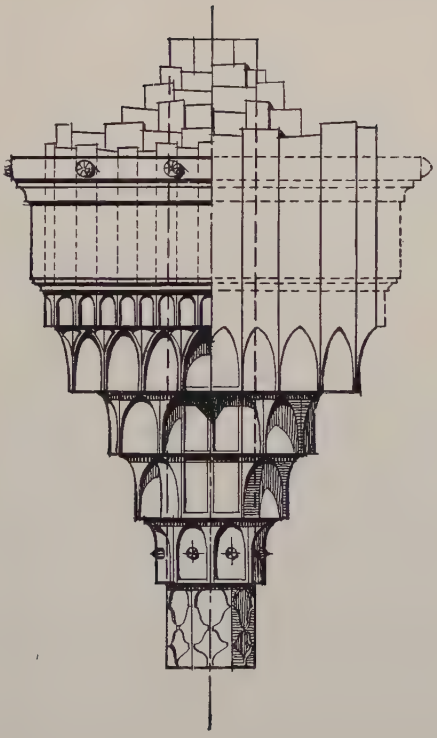

Fig. 4. Construction of a box-core pendant.

or that no attempt was made to sink the profusion of nail-heads. More evident is the fact that soffits are of butt-joint boarding with cracks scarcely concealed under the ever present rosette, and that this is separately carved and nailed into place. As to assembling the ceiling, it was built up piecemeal *in situ*. Beginning with the heaviest timbers, the process of framing continued, passing on to the building up of the coffers and ending in the nailing on of all superficial molds, rosettes, *mocárabes* (small pendants), and the like. In the case of lacería, or strips interlacing so as to form polygons, the process was the same, the flat strips being nailed to the planking.

The wood most often used was the *pino alerce*, or *pinus laricio*, inaccurately called Spanish cedar but closely resembling our common pine, only more reddish in color. This is still abundant or relatively so in Spain's scant forests, and is said to have been very plentiful centuries ago in the now treeless environs of Seville. Chestnut is occasionally employed. Walnut,

the chosen wood of the furniture makers, is seldom encountered in ceilings.

The painted decoration of the Spanish ceiling was of infinite variety, and will be taken up later. For the moment attention is directed to another embellishment that frequently accompanied it — the frieze of *yesería*. *Yeso* (Italian, *gesso*) is the adamantine white plaster which the Moors incised into a running pattern after setting it, using it plentifully in their own architectural work. The yesería frieze on which the Moorish ceiling generally rested was retained in Christian houses, making a most effective accompaniment to the wooden ceiling (*Fig. 3, page 21*). Even where a painted frieze-board runs round the room the yesería band beneath is often seen (*Portfolio, Plate X*), until it fell into disuse in the latter part of the sixteenth century.

Among architects of our own country there has long existed an aversion to anything that smacked of the Moorish. The style is considered too bizarre in decoration and too superficial in construction. We have been content to accept Fergusson's

statement that "The Arabs had no architecture, properly speaking, when they came to Spain"; but the truth is that the Arab at that time, through his contact with Sassanian civilization, was far advanced in the sciences and arts, and brought with him Persian constructive principles. If these sound principles were better known, we would have to readjust our ideas concerning the Arab contribution to Spain.

So far as ceilings are concerned, those who dread everything Moorish as being too complicated and fantastic need only glance at *Fig. 1, page 7*, which is nothing more than a flat boarded surface decorated; or at the truss diagram on *Plate XXVIII* of the *Portfolio*, equally simple in its way and having many advantages over the peaked rafter ceiling as carried out in our land. The extravagant oriental type worked out in stalactite or honeycomb and interlacings is not urged on anyone as a model (though some of the interlacings are simple enough); but where Moorish constructive skill is combined with the simpler decorative themes, the result is both practical and admirable.

III

THE CHRISTIAN CEILING AND ITS HISTORY

The origin of the beamed ceiling, popular in the south and almost universal in the north of Spain, is not so easy to trace. Some claim it to be European, others Asiatic. As the simplest means of constructing a shelter the beamed covering was applied in ancient Asia; and for the same reason it must have been practiced in harsh northern climates quite independently of Asiatic contact—that is if we accredit to our European forefathers ordinary intelligence and skill in the solution of a universal problem. So far as Spain is concerned we know that the Visigoths had beamed ceilings, decorated like the traditional Roman basilica covering. After the remnants of the Visigothic race,

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Fig. 5. Ceiling over cloister walk, Monastery of Santo Domingo de Silos. Renewed in the XV Century

intermarried with northern Asturian tribes, began the Reconquest and thus laid the foundation of the Spanish nation, they built churches in the regained territory. Presumably these churches resembled in a humble way what they had left behind when they fled from the south. At the same time the Catalans, who were expelling the Moor from the northeastern corner of the Peninsula, also built places of worship. A few churches dating from the ninth, tenth and eleventh centuries still stand both in the Asturias and Catalonia. They are replete with oriental characteristics. Both stone vaulting and beamed roofs are met with; and these wooden coverings, though relatively modern, evidently repeat the primitive.

The antiquity claimed for certain Asturian and Leonese churches by Spanish investigators is flatly denied by French archæologists, always excepting Marcel Dieulafoy; but even granting that these examples, instead of being original ninth- or tenth-century structures are eleventh- or twelfth-century remodelings, the fact

still remains that they probably hark back to Visigothic prototypes. Therefore the wooden ceilings that cover several of them, *San Julián de los Prados*, in Oviedo, for example, may be taken as a continuance of the traditional roofing of the Visigothic basilica as it once existed in Mérida or Seville. Hence our designation of this form as Christian for, though used by the Moors also, it is specially associated with Christian edifices in the northern part of Spain where it received its peculiar ornamental cachet.

In Catalonia, where a firm government was established earlier than elsewhere and where the inhabitants were in close commercial contact with all Mediterranean countries, civilization made rapid progress and the arts flourished. The first Christian churches were burnt down during the destructive invasion of Almanzor late in the tenth century, but were promptly rebuilt. In speaking of the oldest Catalan examples, Marcel Dieulafoy, the distinguished Iranian authority, points out "the markedly oriental minaret-belfry

and the timber roofs of the aisles, composed of closely set ribs, the king-posts resting on the tie-beams. These roofs are of the ancient form which was introduced into Spain by the Mussulman carpenters and which had been abandoned by the Romans before the time of Vitrubius."[13] With reference to the decoration of one such roof, or more specifically its underside, there is a document still extant — the foundation deed of the little church at Cuxá, now French Catalonia. It is dated 953 and in it the Catalan Count Seniofret pledges to build a new church "with marvelously decorated beams" (*et lignis dedolatis mirifice*).

Now at this eastern or Catalan end of the Pyrenees, the territory on both sides of the mountains was homogeneous — all Catalan and ruled by the Counts of Barcelona, who began as vassals of the French king but soon achieved independence. During the tenth and eleventh centuries the Arab culture of the Spanish side was so much appreciated by the French that the faculty of Montpelier University was

almost completely Mussulman; also the Christian-Arab architectural union which had taken place in Spanish Catalonia traveled north, even as far north as Burgundy, whence, with Burgundian modifications, it was brought back again into Spain by the monks of Cluny who entered at the western end of the Pyrenees in the eleventh century. On the other means by which Arab art invaded France — the sojourn of Charlemagne, for instance[14] — it is not necessary to dwell here. The point is that the monks of Cluny, and of later orders who came to build in Spain, brought from France as a natural covering for cloisters and convent dependencies a type of wooden ceiling already familiar to the land. Its decoration and also certain structural peculiarities depended naturally on local influences.

Some of these beamed ceilings were decorated in that oriental manner which is generally loosely classified as Byzantine, but which in this case had much more direct connection with Asia. From the first the monasteries in question began

eagerly to acquire all the Saracenic art they could get—silks and other woven fabrics, ivories, gold and silver vessels, enamels. That the patterns of the woven fabrics and carved ivories served as inspiration to the decorators is easy to trace; also the fact that the decorators were, in early days at least, frequently Moors. Moorish miniaturists illuminated the manuscripts; Moorish masons—slaves—are said to have built the cloister of Silos (eleventh century), the most beautiful of the Romanesque period in Europe (*Fig. 5, page 35; Portfolio, Plates I* and *II*). It appears safe to assume, therefore, that where a monastery wanted a ceiling painted, both the design and the one who carried it out were Moorish.

In Galicia, or northwestern Spain, most of the old churches were covered with simple beamed ceilings left undecorated. This province was always poor, had scarcely ever been in contact with the Moors (hence was deprived of expert artisans), and was out of touch with the matured arts of the Mediterranean countries. In their sim-

plicity, the ceilings of Galicia recall those of early Norman churches and, indeed, Norman influence entering by trade across the Bay of Biscay may have had much to do with their fashioning. In this connection it may be mentioned that the fourteenth-century churches of Pontevedra and other Galician towns are surprisingly Norman in aspect.

Comparing the Spanish beamed ceiling with the more familiar French, Flemish, and English examples, we find that the Spanish was almost invariably of pine, and those north of the Pyrenees, of oak. In the latter the art of joinery and molded sections was carried to a nicety. Timber lengths were shortened and carefully dovetailed, mortised, and pinned; and so ingeniously were the component parts locked together that the master was free to carve or mold his beams without materially reducing their rigidity. In the Spanish ceiling, on the contrary, construction remained crude. Beams were simply dimensioned, the transverse members resting on the principals instead of being let in

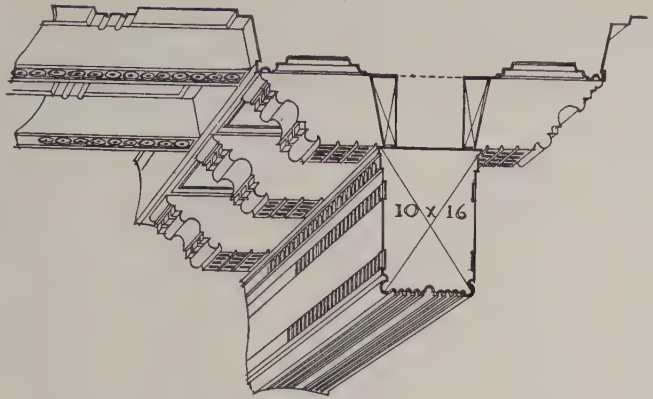

Fig. 6. Section through a ceiling in the Crecientes Palace, Ávila. XVI Century.

When there was paneling between, it was visibly nailed in place instead of being pinned; carved and molded beams were rarely used. Nevertheless, the whole, when painted, became at once the chief architectonic feature of a Spanish room. No other built-in accessory in wood competed with it, for the room usually consisted of four flat unbroken walls. Only in Andalusía was the interior enlivened by a wainscot of colored tiles.

When carving was introduced into the beamed ceiling it was confined to the corbel. It was not the robust carving of northern Europe (though Valencia offers an exception in *Plate XIX*); but the corbel was made to look, by a minimum of cutting, like a weird head. This sort may be seen in the *Portfolio*, *Plate XVI*. Not that the Spaniard was unable to carve the figure; he excelled in it and elsewhere used it almost to excess, but that the whole ceiling tradition remained Moorish, and the Moor never cut the figure in the round. His carving was more likely to take the form of cutting back to a second plane

certain panels destined to hold a painted design. To judge from the ninth-century Córdova work (*Plate XXXII*) this cutting back was the earliest of Moorish ornamental devices.

It is easy to see how these different conceptions of structure and carving, along with the addition of polychrome decoration, resulted in something quite distinct from the somber, oak carved and beamed ceiling north of the Pyrenees. In other words, the one is peculiarly Asiatic in aspect; the other, Gothic, and European.

IV

STRUCTURAL CLASSIFICATION

To classify Spanish artesonados as to style is no easy matter. Applied decoration is no guide, for at all times Eastern motifs have been employed in the type of ceiling which in other lands would have been enriched with Gothic or Renaissance carving; while on the other hand, biblical and Renaissance themes have been painted where the carpentry was distinctly Moorish and, more often than not, Eastern and Christian motifs figured in the same composition. To divide them, structurally, is therefore more logical. Confining the analysis to the simpler examples, we find there are four main types: the *Exposed Beam,* which existed in all periods; the *Concealed Beam,* which in Mudéjar specimens is treated with applied cabinet-

work and, in Renaissance, with coffers; the *Peaked*, which is of open rafter construction held in by decorative tie-beams; and the *Wooden Vault*, with its polygonal variations.

Mere appearances, however, cannot be relied upon to determine the sort of structure; the very nature of the material readily lent itself to imitation of any structural form, and the versatile Spanish carpenter never overlooked this fact. For example, one frequently finds that the apparently three-sided artesonado is not the peaked structure its form would indicate, but is in reality flat, with inclined sides; the beams that support the whole extend horizontally from wall to wall, the sides being a sort of slanted frieze (*Plate XXXVIII*). There was, in short, no limit to the variations of any one system of framing up.

The *Exposed Beam Type:* In its plainest form this type is practically little more than the exposed underside of the floor or roof construction above (*Fig. 5, page 35*). In actual making, it is the simplest of all, consisting of a series of principal beams

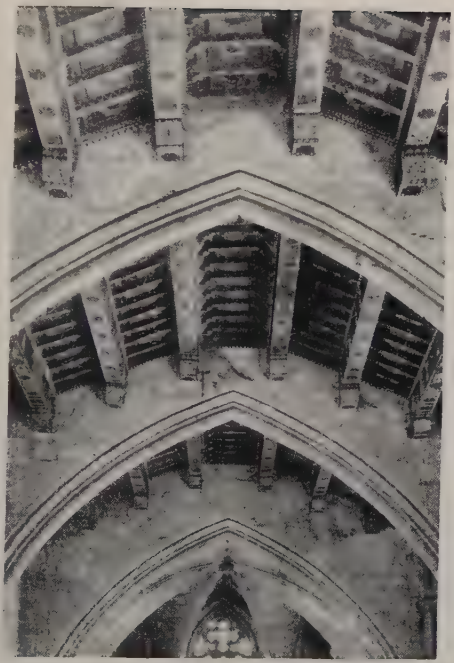

Fig. 7. Ceiling in the Chapel of Santa Agüeda, Barcelona. XIV Century.

extending from wall to wall and supporting a secondary tier of smaller transverse members. The beams may be set either flat or to form a pitch, according to whether there is a floor or roof directly overhead. In large lofty halls the covering often rests on stone arches thrown across the room, an ancient method of which there are Asiatic and early Lombard prototypes.

The medieval flat beamed ceiling was the preferred covering for the Romanesque cloister gallery north as well as south of the Pyrenees. In Spain during the eleventh and twelfth centuries monastic houses, built mostly by French monks, sprang up all over the regions from which the Moor had been driven. Naturally, none of their primitive wooden cloister ceilings remain, but the most ancient survivors, like that at *Santo Domingo de Silos* (*Plates I* and *II*) dating from the fifteenth century, give a fair idea of what the earlier ones were like in form. That the covering of the cloister walk should have passed in time to the patio walk of the castle or palace is natural enough. Here and in domestic

work, in general, ceiling-makers varied th
detail until they reached a point apprec
ably distant from cloister simplicity, as ma
be seen in *Fig. 6, page 43*. In monasti
examples master-beams were placed fro
six to eight feet on center, and smalle
transverse pieces from twelve to fiftee
inches apart. This is not an uncommon ar
rangement in later-day domestic work. bu
where rooms were wide, master-beams wer
sometimes omitted altogether and a seri
of equally stout timbers were placed abou
twenty-four inches on center. Where th
span was very great, the beam ends reste
on projecting corbels often two or three fe
in length, as seen in the Alva (or Alba
palace in Seville (*Portfolio, Plate XII*)
This corbel or *ménsula* was frequentl
carved in the conventional Eastern fash
ion, and its use tended to give the ceili
a camber, thus correcting the sag so in
evitable in old wooden ceilings.

In many examples, monastic and secula
a structural refinement is encountered i
the form of a board fill between the sma
beams of the secondary tier at their poi

of rest on the master-beams. This greatly reduces the nakedness of the timbering, by giving the smaller members every appearance of being housed into the principals instead of merely resting on them. The fill is often inclined outward, a precedent set in early monastic work in order, it would appear, to facilitate reading the legends and escutcheons inscribed thereon; in such instances, however, the wall- or frieze-board between the master-beams is set at a similar angle. This is shown in the drawing in *Plate II* of the *Portfolio* edition of this work. As to the altogether crude method of putting together these coverings, it has already been touched upon in comparing the Spanish beamed ceiling with the Gothic examples of England and northern France.

Besides the painted ceilings, a goodly number of undecorated ones survive. Many are of imposing size with beams hewn from enormous timbers and resting on carved corbels. An interesting and ancient one may be found in the room under the library in the monastery of *Santa Maria de*

Huerta, between Sigüenza and Calatayud (*Plate IV*). In several old houses around the cathedral in Barcelona are others whose only decoration is the painted escutcheon on the corbel faces.

In large and lofty halls, stone arches were thrown across and, on these, either flat or laid to a pitch, rested the wooden covering. In this way a broad span was accomplished in a manner both impressive and economical. This, as previously said, was an ancient Asiatic system, perhaps Syrian in origin, which was much used in northern Italy and in Provence during the Middle Ages. The type abounds in the provinces of Galicia, Estremadura, Catalonia, and Valencia (the last mentioned once a part of Catalonia). In Catalonia, where churches and civic buildings are remarkable for their extraordinary span, it was especially appropriate, as the walls were well bonded by the transverse arches. Where the roof was ridged in form, its decorated underside often served for the ceiling, as in the church of *Santa Agüeda*, Barcelona (*Fig. 7, page 49;* and *Portfolio, Plate XV*); in

other cases the actual roof construction was distinct and the exposed ceiling flat, as seen in the *Lonja*, Barcelona (*Plate XIV*). This latter is set out in an unusual manner. The hall is of great width and, instead of the typical transverse arches, it is divided longitudinally into three naves by two rows of arcading supported on lofty piers (see *Plan*, *Fig. 8*, *page 57*). In all these old arch-supported ceilings, the corbels are either of stone or wood, carved in one piece and passing directly through the stone arch, thus rendering it unnecessary to imbed the beam-ends — a method which leads to dry-rot. For additional security, however, the beam-ends are clamped together by long iron dogs. In a hall long enough to permit of a succession of transverse arches, a noble ceiling results, whether decorated or not, as may be seen in the famous long dormitory of the monastery of Poblet (*Plate XIV*). Among examples with stone arches there is one instance where the arches themselves are profusely painted — the ancient *sala capitular*

or chapter-room of the monastery of Sigena in Aragon.

The beamed ceiling is more intimately seen in domestic work, where a few refinements were indulged in, both constructive and decorative, which would have been entirely lost on a work of larger scale. It seems a general rule that the smaller the room the greater the depth of the ceiling treatment. This is clearly demonstrated in the two Sevillian houses, the Pinelos and the Olea (*Plates XI* and *XIII*). The additional depth is here obtained by increasing the number of superimposed tiers, making three in all — master-beams, secondary or transverse, and the small uppermost pieces, these last destined to support the tile flooring above. In these two examples, which may be regarded as typical, it will be seen that the scale of the decoration becomes more elaborate as the superimposed members diminish in size. Thus the master-beams, at least on their sides, are rarely enhanced with anything more than occasional rosettes or escutcheons, and the same is true of the

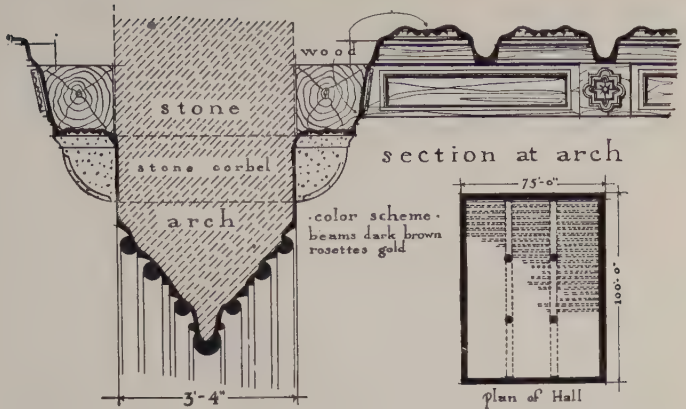

Fig. 8. Section through the ceiling of the *Sala de Contrataciones*, La Lonja, Barcelona. 1382.

corresponding wall board; the second-tier beams are more interestingly treated with scrolls and meanders; but the uppermost, together with the panels between, are rich in arabesques. From this it may be deduced that the amount of decoration applied to any member was in inverse ratio to its structural importance.

The *Concealed Beam Type:* Setting aside for the moment the Renaissance coffered ceiling, which structurally was of this type, and analyzing only the Mudéjar product, it will be seen that the latter was nothing more than the nailing of boards to the underside of the beams either at right angles or diagonally. Moldings were then applied in a pattern of geometric figures or interlacings, and in the small spaces or shallow coffers thus created, were nailed rosettes, pendants, shields, etc.; or, as was often the case, the flat panel was left to the painter to decorate. The whole fabrication was simplicity itself, and the diversity of ornamentation very great, as a glance at the illustrations will show (*Fig. 1, page 7;* and *Portfolio, Plates XXII* to *XXVI* inclusive).

Where this type of ceiling covered a large area it was often braced by diagonal struts at the wall. These in turn were similarly boarded over, creating a covering which was three-plane in section. It happens that examples of this class abound in the region of Toledo, one of the most beautiful being that of the chapter-room in the cathedral; others exist in the *Hospital de la Santa Cruz* in the same city and, some five miles away, in the old monastery of *Santa María de la Sisla* (*Plate XL*), now a private residence. Such ceilings are distinct structurally, it will be seen, from the three-plane peaked ceiling to be described presently.

The *Peaked Type:* For domestic work, the Mudéjar ceiling offering most inspiration to the modern architect is this of open rafter construction (*Fig. 10, page 71*). Primarily, it is as easy to build as our own open timber ceiling and has, moreover, certain points of superiority. First, by truncating the crown of the ridge, a pleasanter and more domestic-looking form is created; second, by coupling up the hip-rafters

greater interest is secured than by the use of our single hip-rafter; moreover, additional interest is imparted by featuring the tie or collar-beams and supporting them on carved corbels. These are often the only decorated item. One of the simplest of this type is in the *Casa Chápiz* in Granada (*Plate XXVII*), yet it involves all the underlying principles of even the most ornate members of its class, as may be seen by turning to the most elaborate specimen (*Plate XXXIV*), the *Salón de Concilios* in the Archiepiscopal Palace at Alcalá, — a hall over 130 feet in length, and surpassingly beautiful in its way.

From the parallel rafters of the ceiling just described to the Moorish interlacing seen in the ancient university, or *Cabildo Antiguo* of Granada (*Plate XXIX*), it is easy to trace the transition. Indeed lacería seemed to grow so naturally out of the rafter system that it is in this peaked type that most of the relatively simple interlacings are found.

The *Vaulted Type:* The richest and most exaggerated expression of Moorish car-

pentry is found in vaulted, domical or *media naranja*, and polygonal ceilings. The Arab who came to Spain was no stranger to the masonry dome as the mosque of Córdova attests. He saw nothing illogical in interpreting the form in wood, and he was willing to take endless pains to treat it with stalactite ornament. This detail, too, was a translation into wood from another material, for the much admired bracketing seen in Moslem brick towers is its original. The Alhambra is rich in these feats of carpentry, but the European is not, as a rule, enamored of them. Nor was he at the time of the Reconquest, for the Spaniard, when he used the form at all, preferred other ornamental treatment than the stalactites. The fact is that the dome necessitating unusual height was not very practical for the generality of Spanish palaces, except over the staircase hall. The same may be said of the lofty polygonal ceiling. Most of the half-orange types date from the sixteenth century and were treated in Renaissance carved ornament (*Plate LVI*). It appears, after much examination of old

Spanish palaces, that when antique dealers go ceiling-hunting the half-orange is their chief quest. Palaces, otherwise intact, have lost the lofty wooden dome over the stair-well and can show nothing but a flat modern boarding. This is unfortunately the case in even so carefully a preserved home as the Alba Palace in Seville.

Over square rooms where height would permit, a variation of the dome is found in the shape of the lofty eight-sided ceiling. The octagon is created by canting the corners, and the sides are projected upward toward a common point until they intersect a truncating panel. The result might be described as a polygonal dome. The exposed peak whether in a square or oblong room, was always distasteful to the Spanish ceiling-maker and the improvement secured by truncating justifies his aversion. To what extent the top panel could be developed, decoratively, may be seen in the charming ceiling of *San Pedro* in Cuenca (*Plate XXXI*). In the parish church attached to the cathedral of *La Seo* in Zaragoza — and very poorly lighted,

unfortunately is one of the most unique and ingenious of Mudéjar polygonal domes. Fundamentally it is the usual eight-sided ceiling with truncated top, but on looking up, the top panel appears to be entirely hidden by a suspended dome or canopy within the outer structure. That Moorish builders were entirely responsible for this original design is certain. Zaragoza was a city of Mudéjares, and their influence pervaded all the architecture of the region. It may be recalled that the exterior of the cathedral *La Seo* just mentioned offers the finest specimen of Moorish brickwork with colored tile insets to be found in Spain.

Mention has been made of the almost ubiquitous beamed ceiling over the nave of early churches in northern Spain. After the Christians took Córdova and Seville in the middle of the thirteenth century, a less elemental covering is found over the naves — a wooden rendering of the barrel vault. In France, when this same form was attempted in wood, tie-beams and king-post were retained, thus frankly declaring that the covering was not self-supporting. The

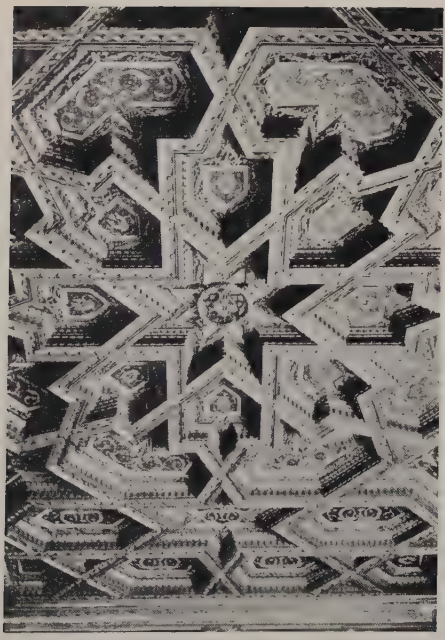

Fig. 9. Ceiling of the Anteroom to the *Sala Capítular*, Toledo Cathedral. 1511.

Spaniards, on the other hand, retained no centering but suspended their vaults from a superstructure. To be sure, there are very few instances where the surface is actually curved; but the vaulted effect is obtained by a three-sided section, as in *San Pablo*, Córdova (*Plate XXXVI*); or by a five-sided, as in *San Francisco de Ayamonte*, in Huelva, or *San Clemente* in Seville (*Plate XXXVII*). In a long nave like that of San Pablo it is only after close observation that one detects the polygonality. Unlike beamed coverings in northern churches, where roof structure and ceiling were one and the same, this Mudéjar so-called vault was entirely independent of whatever came above, whether floor or roof. Structurally it was a sham, and its frame, having no other duty than self-support, was laid out to suit the convenience of its builders.

There is a true vaulted form over the primitive choir and the *capilla mayor* of Córdova Cathedral which is in the southwestern portion (Al-Hakem II). When it was built is not certain, for the painted

floral motifs in the coffers are identical with the cut velvets and damasks of Ferdinand and Isabella's reign, while the Gothic contour of the coffer molds appears to be a century earlier; yet we know that this adapting of the mosque to Christian needs took place shortly after the Reconquest (1236). Referring to this very interesting example of medieval carpentry, Don Vicente Lampérez says, in his *Arquitectura cristiana española*, that it appears exotic in Spain, and he hazards the opinion that if constructed as late as the latter half of the fourteenth century it might be attributed to English influence brought into Spain by the close relations of the Black Prince with Peter the Cruel.

Another true vaulted form, pointed, is seen over the reception room in the nunnery at Sigena on the border between Catalonia and Aragon (*Plate XXXVII*). The coupled tie-beams seen here are unique in vaulted examples; also the pointed form and the paneling. In fact all these features are French rather than Spanish, yet all the painted decoration and, likewise, the

curiously carved corbels with fish-head profiles are emphatically Mudéjar. This important example is very ancient, dating from the end of the thirteenth century if we are to be guided by the presence of the royal escutcheon of Blanche of Aragon, or by the bars of the noble lady Doña Teresa de Urrea, who both professed at that time.

The foregoing are the chief types of Spanish ceiling as evolved prior to the advent of the Renaissance. This great art movement by no means banished them. It merely brought them up to date by the application of painted arabesques, *amorini*, and other Italian designs. It did, however, introduce a separate style, as will be seen in the following chapter; but this was of limited vogue. Neither Italian coffered ceilings of wood nor classic masonry vaulting prevailed over the deep-rooted Mudéjar tradition. Indeed it may be said that the Mudéjar ceiling is the only indigenous art expression which survived the general blight that beset architecture after Herrera imposed his lifeless classic on Spain.

V

THE RENAISSANCE COFFERED CEILING IN SPAIN

Apart from the Mudéjar artesonado, stands one not indigenous to the land — the Renaissance. It made its entry with Renaissance architecture, in general, early in the sixteenth century and endured but a short time. To imitate the Italian coffered ceiling was its object, but it cannot be said that it reached a close resemblance to the prototype. The Spanish mind was, perhaps, too addicted to the Moorish habit of repetition to adapt itself to the Italian conception of composing the whole around a central dominating theme. The blazon, of which the Spaniard was so fond in decoration and which would have served so well as a central motif, was relegated, if

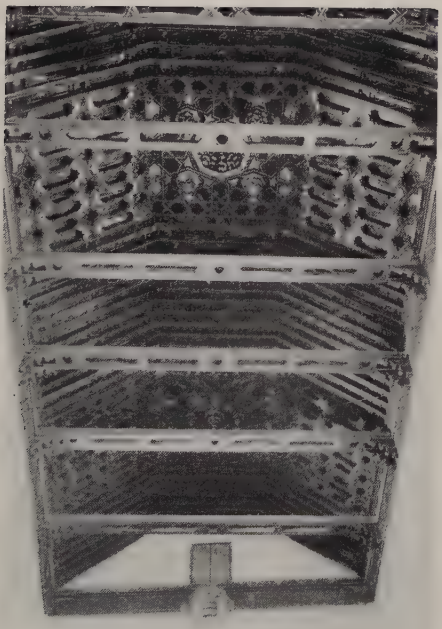

Fig. 10. Ceiling in the Church of San Pedro, Seville. XVI Century.

used at all, to an unimportant panel or to the frieze; the titular saints of Seville, for instance, are far from being a salient decorative feature in *Plate LIV*. Meanwhile the carpenter went on dividing his area into even spacings and fitting these with molded coffers. Polychromy was practically abandoned in the new style. Some few examples were richly gilded, but the majority were left in the natural wood, oiled.

We now find molded sections becoming popular for the first time. In contrast to the rather slovenly methods already criticized in Mudéjar work, they were executed with great nicety, as in the so-called dining-room of Charles V at Granada (*Plate XLVI*), or in the salon of the *Consulado del Mar* at Palma de Mallorca (*Plate LI*). The making of the coffer, too, was carefully studied. It was no mere decorative application; instead, the framing was laid out to accommodate the scheme, thus forming a huge cradle between whose latticed members the caissons were built up. These were of every conceivable

design—square, hexagonal, octagonal; likewise there was great variety of depth; a few ceilings, that of the *Audiencia* in Valencia, for example, contain coffers which are veritable caverns (*Plate L*). In fashioning the new feature some carpenters never completely shook off Moorish complexity, while others arrived at almost Doric simplicity.

Renaissance refinements also invaded the frieze. This was no longer a simple painted wall-board, but an effort to imitate the classic entablature of architrave, frieze, and cornice, with thoroughly developed modillion, dentil, and carved bed-molds. A truly Italian handling of the frieze is seen in the chapter-room of Toledo Cathedral (*Plate XXXVIII*); the rest of this ceiling, however, is traditional Toledan Mudéjar. It is said to have been built and carved by Francisco de Lara, who turned it over to the gilders some time before 1508. As this was contemporary with the tentative, naïve Renaissance worked out by Enrique de Egas in the *Hospital de la Santa Cruz* in that same city, one is puz-

zled to know where Lara got his more advanced classic knowledge. Quite the opposite combination, that is, typical Renaissance in the body of the ceiling and Mudéjar in the frieze, is seen in the palace of Peñaranda near the town of Aranda de Duero.

Both the flat and vaulted forms, already met in Spanish carpentry, lent themselves to the new embellishment of coffers. The one more frequently encountered is the flat, together with its variation of inclined sides described on a previous page. It was generally treated in a succession of regularly spaced coffers but, as the average carpenter was tenacious of Moorish ideas, there are not lacking examples where stars or interlacings form the basic idea of the coffering, although with plenty of pure Italian carving in the detail. A curious and interesting example of this is to be seen in Cuenca Cathedral where, from a large lozenge-shaped central panel hangs a huge pendant built up of Renaissance moldings and carved ornament. Even more Moorish, and with Renaissance confined to the

painted motifs, is the beautiful and oft-quoted ceiling to the anteroom of the *Sala Capitular* in Toledo Cathedral (*Fig. 9, page 65*).

An offshoot of the flat coffered ceiling is that of inclined panels extending around all four sides of the room like a sort of inclined frieze. It is the same form met in pure Mudéjar work. As previously mentioned this form was peculiar to Toledo. Several good examples carried out in Renaissance coffering exist in the former monastery of *Santa María de la Sisla*, near that same city (*Plate XL*). In Toledo, itself, one has a unique opportunity of comparing this sort with a true three-plane type, by standing under the open crossing of the Santa Cruz Hospital. This building is a cross of four equal arms, two stories high, with the crossing extending open to the roof. From this point one has a long vista of flat beamed ceilings with inclined sides on the first story, and open rafter or true three-plane-in-section, on the second. The architect, Enrique de Egas, built a hospital of similar plan in Granada,

Fig. 11. Vaulted ceiling in the Chapel of the Luna Palace, Zaragoza.

with ceilings of inclined sides covering the long arms of the cross. All are treated in Renaissance coffers. In this case we have the good fortune of knowing the carpenter's name, Juan de Plasencia, and that he also executed the ceilings designed by Machuca for the apartments of Charles V in the Alhambra. Of this flat form with inclined sides, the masterpiece is in the chapter-room of Toledo Cathedral (*Plate XXXVIII*).

Considering the popularity of the vaulted form in Italy, and the fact that Spanish ceiling-makers were already familiar with it, it is surprising that this form was not more often used in Spain during the Renaissance period. Only a few of vaulted section were built for coffering. One, a barrel vault, exists in the chapel of the Luna Palace, in Zaragoza (*Fig. 11, page 77*); and another, a quadripartite, in the *cabildo alto* of the Town Hall of Seville (*Plate LIV*). In the latter, the working out of the coffers at the groin, always a difficult passage, is most expertly handled. In fact, in its form this example is not unlike the

classic *stucco-duro* vaulting in the tombs of the Via Latina in Rome. This quadripartite is, moreover, most sumptuously gilded and is one of the gems of the Renaissance style in Spain.

A ceiling adjunct of Moorish origin popular with Renaissance builders was the open circulating wooden gallery underneath. Gallery and ceiling were one decorative unit and made an imposing treatment for large salons and stair-halls. Designed to be a continuous passage around four sides of the room it was not confined like the minstrel gallery in old English halls, to one end. As it was generally open to the exterior, it served admirably as a ventilating loft.

The earliest gallery of Christian make is that in the throne room of the Moorish *Aljafería* in Zaragoza (*Plate XXI*), remodeled into a royal residence for Ferdinand and Isabella. This remodeling took place in the late fifteenth century and is one of the few mixtures of Gothic and Moorish motifs in carpentry. Like the well-known Valencian gallery (*Plate XLII*)

the ceiling is flat and framed up with gigantic beams which provoke the criticism that the delicate members of the balcony appear to bear the heavy weight of the whole ceiling. To a certain extent this criticism is justifiable; but when one looks up from the floor and sees the heavy transverse beams exposed clear to their point of insertion in the wall, one then understands that the gallery is not a supporting feature — that it is in reality nothing more than an accessory to the ceiling. It is in combination with the half-orange type so often used to close in the Spanish stair-hall that this feature is seen at its best. Carried out, gallery and all, in pure Renaissance it forms a very handsome treatment over the *Archivo de Aragón* in Barcelona (*Plate LV*). This was built about 1534 for Charles V by a Catalonian architect named Carbonell. In the *Real Maestranza*, or Royal Cavalry Club of Zaragoza, is another Renaissance example. This, to judge from the rest of the palace (it was built for the Ayerbe family), might be a century later, for architectural wood-

carving in the form of cornices and far-spreading eaves remained a vigorous tradition in that city throughout the seventeenth century. A very fine media naranja and gallery from Zaragoza was sold intact, along with the entire palace that contained it, to a Parisian antique dealer some twenty-five years ago. This was the Casa Zaporta, or *de la Infanta*, illustrated by Andrew Prentice in his *Portfolio of Spanish Renaissance*.

Oddly enough it is in Andalusía, that part of Spain where Moorish traditions were most deeply rooted, that the greatest number of Renaissance ceilings were built. This is explained by the fact that the Emperor Charles V, chief patron of the new style, favored Seville and Granada and ordered the preparation there of new royal apartments. For those in Granada, the architect Pedro Machuca, who had been trained in Italy, designed the finest set of Renaissance ceilings in Spain (*Plates XLV*, *XLVI*, and *XLVII*). In one of the rooms of the Moorish Alcázar of Seville, remodeled for the Emperor's marriage, is a

ceiling somewhat similar to the Granada example illustrated in *Plate XLVII.* This has been pronounced by Spanish admirers to be the best Renaissance ceiling in Spain, but the fact is that in execution it is not comparable to the Alhambra work, nor does it appear fine enough in design to be attributed to Machuca. Other excellent but isolated examples may be named throughout the south, but in the way of a complete Renaissance series, the next finest after Granada is in the Episcopal Palace at Alcalá, New Castile (*Fig. 13, page 91;* and *Portfolio, Plates XLVIII* and *XLIX*). These date from the making over of the palace in 1534 and the years immediately following by the great patrons of Italian art, Don Alfonso de Fonseca, Archbishop of Toledo, and Don Juan Tavera, his successor.

It will be seen from the foregoing that it was only in important architectural commissions that the Renaissance ceiling was designed; in other words, only where some prominent architect conversant with the new motifs was employed, like De

Egas, Machuca, Covarrubias (at Alcalá de Henares), or De Riaño (at Seville). For average work, the ceiling-maker went his Mudéjar way unhampered by innovations. The Renaissance was but a passing phase, very few being built after the latter part of the sixteenth century.

Fig. 12. Ceiling in the house of Cervantes, Valladolid. XVI Century.

VI

THE PAINTED DECORATION OF CEILINGS

It is probable that long association with the Moors kept the Spaniard faithful to the polychrome ceiling. Painted decoration, like the whole system of ceiling-making, fell into two distinct groups according to whether the Moorish or Christian influence was stronger. In the north was the naïve Gothic desire for pictorial representations; but as the painters who executed them were often Moors or, if Christians, were familiar with miniatures painted in the Persian fashion, the scenes depicted, whether biblical or historical, were full of Eastern elements. This indeed is their chief charm. In the south the classic Arabian themes — stars, shells, conventionalized flowers — held sway and

persisted even after the Renaissance had introduced new motifs.

Though not a ceiling, strictly speaking, we give brief space to the ciborium illustrated in *Figs 15* and *16*, *pages 103 and 107* because they are among the earliest existing Spanish specimens of painting on wood. The ciborium (Spanish, *cimborio*) was a sort of rude canopy erected over the altar in the churches of upper Catalonia; at least the rural examples were crude. In the cathedral of Gerona, covering the high altar, is a sumptuous canopy of beaten metal, but only the towns could command retables and altar fronts, or antependia, of hammered silver inlaid with enamels and precious stones. The humble little Pyrenean villages were content with the simple wooden shrine, painted with the prescribed images of Christ, the Virgin, or the Four Evangelists. The drawing in these canopies is archaic, the coloring strong, and the carpentry crude, the latter often of Moorish derivation as seen in the little brackets of *Fig. 15*, *page 103*. Here the center is dark green with the figure draped in red, and the spandrels red

with the figures of the Evangelists in black. Halos and the enclosing circles are yellow paint, nor is it likely that they were ever gilded. In *Fig. 16 (page 107)* a detail from another canopy, flat quadripartite in section, the figure is red set within a dark green oval. The general background is yellow, and the leaf patterning very similar to early embroidery, green and black. The two ciboria illustrated date from the early thirteenth century.

There are several very ancient beamed ceilings in Spain with paintings well preserved and hardly retouched. Remote from all routes of travel lies the monastery of *Santo Domingo de Silos* with the famous example in its cloister (*Fig. 5, page 35;* and *Portfolio, Plates I* and *II*); and hardly more accessible is the Teruel example covering the cathedral of that city. These date from the fourteenth and the fifteenth centuries. In addition are others equally old, but with the colored decoration restored more or less faithfully like that in the Provincial Museum, formerly the chapel of Saint Agatha, in Barcelona (*Fig. 7, page 49*). In the

case of Teruel, a detail of which is given in *Fig. 14, page 99*, the Canons of the eighteenth century having vaulted the nave with masonry about six feet under the original beamed roof, one may climb up and scramble about between the two. The space is dark, and photography impossible; but in the best-lighted portion one may study minutely the execution. The whole vast wooden surface to be painted, including beams and intervening members, was first covered with linen of a fine quality, and on this was laid a coating of plaster — nothing else, in fact, than the tempera process used by the primitive panel painters.

This process of the European panel painters during the Gothic period is well known — how they glued linen to the face of the panel and then laid over it many coats of slaked plaster-of-Paris (Italian *gesso*, Spanish *yeso*) mixed with size, modeling this last where relief was desired. The plaster was then rubbed smooth until it looked like ivory. As the huge beams of Teruel are roughly hewn and the paintings at minute scale, the amount of careful pa-

tient manipulation in the "make-ready" is astounding. The authors believe the actual painting to be in *tempera* although Don Vicente Lampérez asserts it to be in oil. The drawing is archaic, embracing contemporaneous scenes as well as biblical. The multiplicity of painted figures and conventional motifs on this large ceiling make it the most extraordinary one of its kind extant. Over the portion corresponding to the High Altar are scenes from the Passion; but over the nave the subjects are profane —hunting scenes, the marriage of Don Alfonso of Aragon with the sister of the King of Castile, and a profusion of bishops and other dignitaries. The decoration dates from the first third of the fifteenth century, but parts of the structure are believed to be of the thirteenth.

Whether the same process was followed at Barcelona (*Santa Agüeda*, for instance) would be difficult to verify without the same opportunity of close inspection. The architect who copied fragments of the destroyed Montesión ceiling, the late Agostín Rigalt, probably knew, but left no

memorandum of it on his drawings in the Barcelona Museum (*Portfolio, Plate VIII*). It is not likely that the elaborate business of wrapping the beams in linen was resorted to for any but the most important commissions. In the cloister of Silos the paint (tempera) was applied directly to the wood after a slight preparation of size to resist absorption. This appears to be the method followed in the Andalusian examples, where much oiling for the purpose of resisting the dry heat was the first step, and where the dark transparent oil itself frequently served as background for colored decoration; also in Aragon one finds an occasional painted object, such as a door, or a painted ceiling fragment in some provincial museum, which bears no sign of having been first prepared with either linen or plaster. In the National Museum of Madrid there is a huge door from Daroca, near Teruel, whose almost vanished vermilion background appears to be oil paint applied direct without any sort of subcoating.

During this time — the fourteenth and

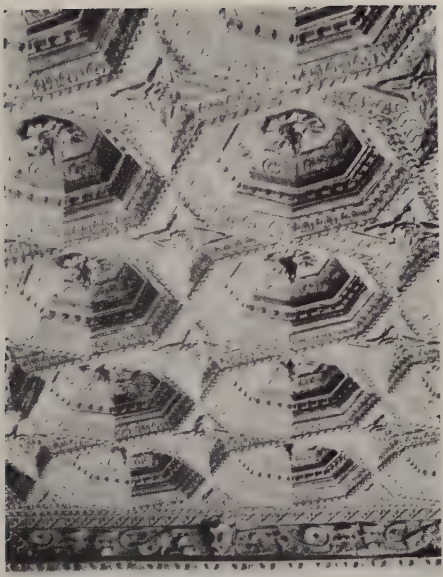

Fig. 13. Ceiling from the Episcopal Palace, Alcalá de Henares. XVI Century.

the fifteenth centuries — the rules for ceiling painting seem to have been as definitely laid down as in the heraldry of the day. No two colors were ever permitted to touch, being separated by a line of either white or black. Red and green, or red and black generally competed in one background. There was no modeling and no perspective. The white outlines of the design were never without interest; they zig-zagged or waved like tendrils; and when wide enough, say a half-inch or more, were further enlivened by a sort of checker pattern. This was but one of many little conceits designed to add interest to the bands which framed pictorial incidents.

The earliest ceilings extant, both northern and southern, were brilliantly colored, and could they appear to-day in their original vividness, there is no doubt that the modern eye would find them garish. Primary colors were used for the field, and the design was much enlivened by borders of black, white, and gold. *Plates VIII* and *XVII* show this. In Renaissance days, when color harmony became a

study, effects grew quieter, primary colors being subjugated to one dominating tone, instead of violently opposed to each other in equal masses. In Andalusía there was a tendency in the sixteenth century to eliminate color and to work out a scheme in black, gray, and gold. Such sobriety is curious in that region of gorgeous color, but it shows up rich enough in conjunction with the customary white plaster walls. Equally simple in scheme but dazzling in result are those ceilings carried out entirely in bright red and gold, with the walls left white and with red lacquer furnishings. (This type of furniture was much imitated in Spain and Portugal from the Chinese importations in the seventeenth, and in the eighteenth century.) The traveler who will take the trouble to stop off at Osuna, a little south of Seville, will see such a combination in the reception room of the mausoleum erected there by the Dukes of Osuna. Even in humble villages along the Catalonian and Valencian coast, where there was no pretense at architectural treatment, one finds a definite decorative

scheme. Walls, for example, are canary yellow, salmon, or white, and the crude ceiling beams are ultramarine with a little stenciled motif in white or black on the soffit. This probably perpetuates some early local tradition repeated faithfully, year after year, by a people slow to try innovations.

In ceilings with figures, so great is the profusion of pictured events that one wonders if the artisans sought to make up for the lack of mural painting in Spain by recording the familiar scenes of daily life on the ceiling beams. Such Gothic ceilings, unfortunately now rare, are almost as valuable as the illuminated manuscripts of the day for the study of customs and costumes; or rather, they would be if the small scale of the work and the height at which it is placed did not make it less accessible. In the uniformly small scale observed the scheme harks back to the Orient where the conception of a design was always minute. There is no distinction as to size between paintings on a low cloister ceiling and those on a lofty hall or

nave. In an age where architectural scale was thoroughly understood, the lack of it here strengthens the theory that the decoration was inspired by illuminations and by Eastern textiles, — those rich stuffs woven and patterned after the best Sassanian material by the Moors of Spain, and used in the early churches for religious vestments and altar hangings.

It appears strange, at first glance, that profane subjects were so freely admitted into the decoration of religious houses. The recluses of Silos gazed on lively hunting scenes, bullfights, and even on the forbidden sex engaged in domestic occupations like spinning and gardening. In Teruel cathedral, as mentioned, we also find this sort of theme accompanied by subjects depicting historical events. But out of place though it may seem, it is all quite in keeping with the sculpture of the time, which tolerated every kind of facetious and mundane theme in the carving of capitals and choir stalls, — witness the rats gleefully burying their enemy, the cat, who suddenly comes to life and gobbles them up, — this

in Tarragona cloister; or the fox frocked as a priest and preaching to a group of hens robed as nuns, — this in the famous choir stalls of Plasencia Cathedral.[15]

In Gothic pictorial presentations there are pronounced Eastern touches, such as the little border of dots, and the confining of a figure or group within a geometric frame. Frequently the frame thus marked off is set back slightly so as to sink the panel where the chief theme is to be painted, leaving the reveal to be checkered in black and white. In the eaves of Teruel Cathedral — for even these are elaborately decorated with personages and animals — the board is carved as a separate shape and the decorated panel fastened in behind, in the ordinary manner of picture-framing.

Not all Christian painted ceilings were dedicated to pictures. Eastern decoration, exclusively, is also met. The beautiful fifteenth-century ceiling of *Santa Agüeda* in Barcelona is made up of alternate panels of vine foliation and geometric patterning. Another Catalan work, also geometric but not oriental, is the chapel ceiling in the

castle of the Rocaverde family at Perelada. The various family quarterings are painted separately on little shields which extend in long rows on the beam-sides and corbel-faces, in the same manner as the family blazons on the walls of old baronial halls north of the Pyrenees.

A most distinctive and effective detail of all these fifteenth-century ceilings was the painting of the bed-molds, generally a simple quarter-round, though an ogee is sometimes met with. The pattern was either dog-tooth, chevron, or checker, painted in black and white or blue and white, and it never failed to impart a lively sparkle, particularly to the shadowy parts of the ceiling. On flat unmolded surfaces, parallel lines of scoring were often used, filled with brilliant blue or white and looking like enamel or pearl inlay. In more highly developed schemes geometric and leaf forms are beautifully combined with animal life — graceful swans whose necks intertwine, winged griffins, and the like — composed in the oriental way This type is well illustrated by the restora-

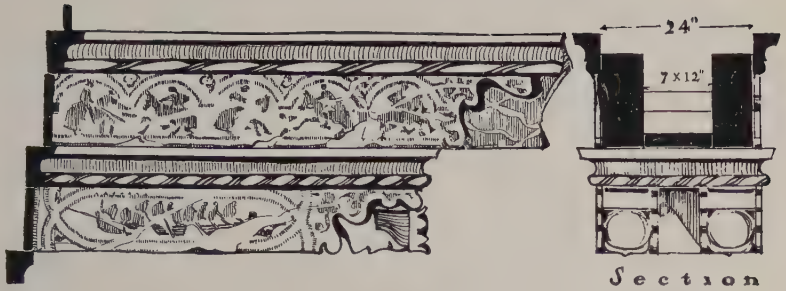

Fig. 14. Corbel from the original ceiling, Teruel Cathedral.
Early XV Century.

tion drawing of the cloister of Montesión (*Plate VIII*). At Sigena Monastery, in the chapter-room, is an early and unusual specimen of elaborately painted stone arches in combination with a timber roof.

Regarding all these examples it must be borne in mind that the color employed was pure pigment, that blending or applying one distinct color over another was undreamed of. That the result is not more violent is due to the minuteness of the patterning and the avoiding of large undecorated spaces. So kaleidoscopic is the effect that one is baffled as to what really is the dominating color note. To this general rule there are a few exceptions — one at the previously mentioned Osuna mausoleum, another in the chapel at Perelada, where the panel soffits are carried out in solid Pompeian red unmitigated by any design, though the remainder of the ceiling is richly ornamented. Even more startling are the fragments from the now ruined palace at Peratallada, in the province of Gerona, where the great hall was covered with a beamed ceiling

entirely carried out in brilliant red, bed- and frieze-molds being decorated in black and white. Little remains *in situ* as most of the ceiling was recently sold and carted off to Barcelona.

As mentioned, the Spanish practice of oiling ceilings was turned to decorative account. It enabled the decorator to obtain a clear transparent background on which to apply a simple scheme in black, white, or gold. This is of Moorish origin but was much employed in Renaissance days. By its use the texture of the wood was not concealed under, but made to contrast with, the opacity of the paint. Before oiling, a preservative stain was rubbed into the pine. The following recipe for such a liquid was supplied by the ceiling-makers recently employed in restoring the sixteenth-century ceilings in the Santa Cruz Hospital in Toledo, and vowed by them to be the original mixture: One part glue, four parts lye, a small quantity of powdered burnt siena, all to be stirred into sufficient boiling water to make a fluent application. This should be left for

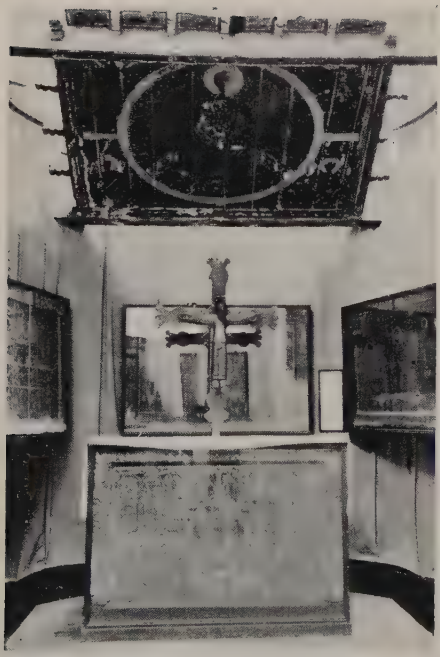

Fig. 15. Ciborium from Tavernoles, Upper Catalonia. XIII Century.

some time and then rubbed down before the first oiling takes place.

Most painted Gothic ceilings have disappeared, at least in part, for when restorations were necessary in later years the new portions were left unpainted. The provincial museums scattered throughout Spain possess many quaintly painted early fragments. In the Archæological Museum of Madrid are some similar to the cloister at Silos, but containing figures only as decorative motifs. These are said to be from that same province of Burgos. Other primitive bits are the painted beams and frieze-boards gathered in from various parts of Catalonia for the museum at Barcelona (*Plate V*).

It is gratifying to find, however, that wooden ceilings are still being built and decorated in the spirit of the old, thus perpetuating, unbroken, a tradition that has been rooted in the land for over a thousand years. We have said that it is in Andalusía that there is most activity in this field. In all the new work, civil and domestic, of the few latterly prosperous

decades, the architects have given preference to the national type of ceiling, and carpenters and decorators can always be found capable of interpreting it. This is borne out by recent work in the new Exposition Buildings in Seville, and in the remodeled Sánchez-Dalp palace (*Plates X* and *XXXIII*) where, in many rooms, there was little to guide other than a few old beams or a frieze-board. New ceilings of much charm have also been executed in Barcelona and in Sitges, a summer resort a little farther down the coast. None of the modern ceiling-makers are guilty of the anachronism of copying the archaic Gothic pictures, but when they repeat the simple Mudéjar decorative themes and coloring they are merely speaking their native tongue.

Fig. 16. Central detail, Ciborium from Estemariu. XIII Century.

NOTES

1 "*Carpintería de lo Blanco y Tratado de Alarifes* dedicado al Glorioso Patriarca San Joseph por Diego López de Arenas Maestro del dicho oficio, . . ." Second edition printed in Seville in 1727. Third edition with notes and glossary by Don Eduardo de Mariátegui, Madrid, 1867. Fourth edition by Guillermo Sánchez Lefler, Madrid, 1912. A treatise more intelligible to moderns on the art of building the same type of ceiling is *El arte de la lacería* by Don Antonio Prieto, Madrid, 1914.

2 *Diccionario de los artífices sevillanos, por* José Gestoso y Pérez, Sevilla, 1899.

3 "This magnificent Mudéjar ceiling is not the original, but was made in 1537, as is proven by the royal warrant given in that year by Charles I to the municipality of Córdova to spend thirty thousand maravedis on the work. This document further proves that the church never had vaulting, since the words are 'to lay new beams because the walls have bulged and the former beams do not fully span them.'" *La arquitectura cristiana española*, by Don Vicente Lampérez, vol. I, p. 587.

[4] Article entitled *Artistas exhumados* in the *Boletín de la Sociedad Española de Excursiones*, vol. VIII, p. 227.

[5] Marcel Dieulafoy, in his *Statuaire polychrome en Espagne*, gives much valuable information about these decorators, subdividing them into their various classes. No doubt the same men, except the *encarnadores*, or flesh painters, worked on ceilings.

[6] Estofar, from *estofa*, woven material, is the process of imitating rich fabrics in polychrome wooden sculpture. The robes of the saints were first heavily gilded, then painted and the paint partly scratched away to reveal the gold. The term *estofar* extended in meaning to include any decoration on wood, which had gilding underneath. In the curious volumes of *Secretos raros*, published in Madrid in 1808, are recipes for this process as well as for oiling and preserving pine.

[7] *Guia artística de Sevilla*, por Don José Gestoso y Pérez, Sevilla, 1886.

[8] *Opus cit.*

[9] The silver ducat of that day was worth three hundred and seventy-five maravedis, being a little over eleven *reales*, or nearly three *pesetas*—about fifty-five of our cents.

[10] Before Morales' visit the whole central portion had been torn out to install the high altar and choir, and had been plastered over as at present. Subsequently the remaining parts of the mosque ceiling were hidden under plaster vaulting. This latter has recently been removed and a fair amount

of the original Moorish work is coming to light. (See *Portfolio, Plate XXXII.*)

[11] *The Arts and Crafts of Older Spain*, by Leonard Williams, London, 1907. Vol. II, p. 57.

[12] Mudéjar comes from the Arab word *mudejalat*, variously translated as subdued, and as authorized to remain. The Moorish population remaining in Christian Spain were called Mudéjares until the compulsory baptism ordered by Cardinal Cisneros: after which, those who submitted rather than leave the country were called Moriscos.

[13] *Art in Spain and Portugal*, by Marcel Dieulafoy. New York, Charles Scribner's Sons, MCMXIII. See pp. 36, 75, 95, 96, 130, 152–155, 159.

[14] Viollet-le-Duc reminds us that Charlemagne, who went into Spain to fight the Moors towards the end of the eighth century, found there far more art and culture to receive than to give; and that "if from the eighth to the twelfth century in France the fashioning of the garment was Roman, the material was Oriental." *Dictionnaire de l'architecture française du XI au XVI siècle*, vol. I, p. 120.

[15] Saint Bernard in his eleventh-century protests against the rich decoration (principally sculpture) of religious houses, would surely have included these paintings had they been executed in his day. "What good purpose do these prodigies of beautiful deformities serve in the cloisters before the

eyes of the friars at their pious readings?" he wails. "Why these . . . soldiers who fight, these hunters who blow the horn? Everywhere appears a variety of strange forms of such fantastic design that the friars must be more occupied in deciphering the sculptures than in studying their books." What would Saint Bernard have said of the Castilian cloister of *Santo Domingo de Silos* where not only were there "prodigies of beautiful deformities" in the carved capitals, but on the painted ceiling, "hunters who blow the horn" and fair ladies who respond?